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ABSTRACT

This guide is concerned with productivity measurement and improvement in mental health centers, and focuses on the relationship between service outputs and available clinical staff, i.e., staff productivity. Staff productivity measures are described as useful in identifying existing levels of productivity, making comparisons to determine the adequacy of these levels, and monitoring changes over time. Other assessments which determine the nature of the workload are presented. The strategies designed to improve the productivity of the clinical staff focus on methods for increasing the amount of services provided, including: (1) making better use of clinical staff time; (2) increasing the demand for services and (3) improving ongoing management practices. (NRB)

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IMPROVING STAFF PRODUCTIVITY IN MENTAL HEALTH CENTERS

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FOREWORD

The Southern Regional Education Board was awarded a grant (Mental Health Training Grant No. 1-T15-MH14703) in late 1976 from the State Manpower and Development Branch of the National Institute of Mental Health. The Project was to develop publications and conduct workshops to assist mental health centers in improving their management practices and their program activities through the use of practical program evaluation. A series of publications and workshops is being developed through the combined efforts of the Board's staff and task force participants. Topic areas include:

- The Administrative Uses of Program Evaluation
- Use of Information Systems for Monitoring Mental Health Programs
- Linking Needs Assessment to Program Planning and Management
- Quality Assurance in Mental Health Centers
- Client Outcome Evaluation in Mental Health Centers
- Improving Staff Productivity in Mental Health Centers

The selection of these topics was based on the preferences expressed in a survey of mental health centers and clinics in the 14 states served by the Southern Regional Education Board.

Improving Staff Productivity in Mental Health Centers explores the application of productivity concepts in mental health centers and other human service agencies. This publication is based on the recommendations of people in mental health centers and state mental health agencies. We thank all of them for their willingness to share their knowledge and experiences with us. We assume responsibility for the content of this report, including any misunderstandings resulting from the translation of ideas.

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INTRODUCTION

Productivity is not a new concept; it has been used as an analytic and decision-making tool by economists and industrial managers for many years. But, the idea of applying "productivity" to human service agencies is recent. This interest in productivity comes from a number of sources. There are increased pressures to control public expenditures while the federal funding is declining in most community programs. The new legislation in PL 94-63 requires additional services for specific groups of clients within communities. Finally, federal and state legislative actions now require managers to be more accountable with public funds and provide data on the efficiency and effectiveness of service programs. Under these pressures, managers are re-examining program goals, analyzing how resources are used, increasing the documentation of services delivered, and trying to find ways of generating new revenues.

The application of productivity concepts can assist managers to meet these increasing external pressures by more closely relating service outputs to program inputs, improving the use of existing resources, reassessing expectations in terms of changing needs and resources, and incorporating new techniques and technologies.

The purpose of this publication is to explore the application of productivity concepts in mental health centers and other human service agencies.

We propose a definition of productivity, examine how productivity relates to service delivery functions, and suggest methods for the analysis and improvement of productivity in clinical services.

Because of the paucity of literature about productivity in human service agencies, literature on productivity programs in government agencies and applications of productivity concepts in selected mental health centers are used to translate productivity concepts to human service settings. The definition of productivity varies slightly according to the setting in which it is applied. In the course of developing this publication, it has become evident that even in the same general setting, specifically mental health centers, the perception of productivity varies from person to person. Evaluators often see productivity as a measurement process which follows the basic canon of research design. Managers see productivity as doing better with what they have by reorganizing resources, staff, and procedures. These differing perceptions create problems in defining what productivity is (and isn't) and in labeling what is (and isn't) being measured. This publication considers both of these points of view in an effort to stimulate further interest and inquiry into the applications of productivity concepts in the field of mental health.

DEFINING PRODUCTIVITY

The meanings attached to the concepts and measurement of productivity vary according to the setting and focus of their application. In this publication, the setting is a mental health center or a similar, local public human service agency. The focus of concepts and measures is limited to the analysis and improvement of the productivity of clinical services and direct service staff although it is recognized that there are other aspects of productivity in a mental health center, such as the organization as a whole, its programs, and administrative and support staff. This focus is chosen for several reasons. First, the application of productivity concepts in human service agencies is new. The content of this publication is largely based on the actual experiences and recommendations of managers in mental health centers whose initial efforts to measure and improve productivity focused on clinical staff. More information is, therefore, available on this aspect. Second, the productivity of clinical staff is relatively easy to identify and improve. Finally, clinical staff often represent the largest number of employees in an agency. They are also the primary "producers" of services.

Mental health managers state that they become concerned with improving productivity in their agencies when one or more of the following events occur:[1]

- o Low productivity, often coinciding with a change in leadership;
- o Deficits and low fee collection;

- o New payment mechanisms, such as state purchase-of-service contracts or third party payments;
- o Rapid growth precipitated by new funding;
- o Diminishing federal or state funding.

This listing suggests that the interest of managers in the application of productivity concepts is initially on producing more services with available clinical staff. These managers also report that, after their efforts to improve the productivity of clinical staff are underway, they become concerned with the effects of these changes on the quality of care and the improvement of clients. Several relate the findings and recommendations of their quality assurance committees to the productivity of clinical staff. Those having access to client outcome evaluations recommend that both quality assurance and client outcome findings be related to staff productivity.

Managers also emphasize that a concern about productivity is not always precipitated by poor staff performance or the desire to make staff work harder. The application of productivity concepts can assist managers in determining the workload that can be carried by staff, planning and organizing services, defining performance expectations of staff, and assessing the relationship between service outputs and client improvement. In more general terms, it assists managers in making their agencies productive and accountable to the community, and local, state and federal funding agencies.

A PROPOSED DEFINITION

Traditionally, productivity is the comparison of the outputs generated by an organization or industry (e.g., products) to the inputs used to produce

these outputs (e.g., workers, salaries, time). The basic index used to measure productivity is derived from a ratio of output over input:

$$\frac{\text{OUTPUT}}{\text{INPUT}} = \text{Productivity Index}$$

This productivity index can be improved by: (1) increasing outputs using constant inputs, or (2) maintaining constant outputs using reduced inputs. Managers must also maintain the quality of products at an acceptable level. Therefore, the products that are counted as outputs must meet a desired standard. It is helpful to look at a simplified model of production functions when describing this traditional productivity concept and its applications. The basic elements of production can be described as:

INPUTS ⟶ PROCESS ⟶ OUTPUTS

or

RESOURCES are used to perform ACTIVITIES that produce PRODUCTS

Because mental health centers do not produce "hard goods" as products, the meanings of input, process, and outputs used in this model require some examination. The purpose of mental health programs is to improve the mental health status of people in the community. Thus, the ultimate "end product" of mental health centers can be seen as the results of treatment on individual clients and groups of clients. When the product of mental health centers is viewed in this way,

> PRODUCTIVITY is the comparison of client results (end product) to the resources (program inputs) required to produce these results.
>
> The OBJECTIVE of productivity improvement in mental health centers is to transform resources into desirable client results, not just to produce more services.

The MEANS for achieving this objective is to manage for productivity by making the best use of available resources in the process of providing services.

Program inputs are all those people, things, and ideas that are needed to deliver services to clients, such as staff, space, equipment and supplies, and the operational plans that define how they are to be allocated, organized, and used. These inputs are used or transformed in the process of delivering services -- the activities of staff that are related to client care and the maintenance of the organization itself. Clinical activities, or services (e.g., screening, intake, diagnostic, case planning, treatment, and client-related services) can be added together by using a common measure, such as hours of direct services provided to clients to show the total clinical service outputs for staff, service units, or programs. These service outputs yield client results or the end products of mental health centers.

Managers ask two questions when applying productivity concepts in this way:

1. Are clinical staff being used efficiently in the service delivery process?
2. Are the services provided by clinical staff producing desirable client results?

The first question focuses on the relationship between clinical service outputs and the staff that provide these services. The second involves the assessment of the relationship between client results and the amount of resources or staff effort expended in producing these results. Methods for measuring the latter relationship are in the early stages of development. Literature describing some of the methods proposed by management and evaluation experts in human services is listed in the Reference Notes.[2]

Because of the newness of the potential applications of productivity concepts in the management of mental health centers, most managers have focused on the first question. Therefore, discussions about "productivity" will be confined to the measurement and improvement of the relationship between service outputs and available clinical staff, or staff productivity.

There is a distinct difference between measuring the productivity of clinical staff, and managing for productivity through improving the way that clinical staff and other resources are allocated, organized, and used to provide services to clients. Managers use productivity measurement to identify existing levels of productivity in the agency, compare existing levels to norms, and monitor changes in productivity over time. Current methods of measurement assess the relationship between total service outputs and the staff time allocated or used to produce these service outputs. Managers identify productivity levels and monitor progress by using data yielded by these measurements, but they also use other methods of assessment to examine the clinical process, and identify why productivity levels are what they are, and to suggest how existing levels can be improved without lowering the quality of clinical care. One of the methods of assessment involves the analysis of workload (the amount of work to be done in relation to the clinical staff available to do it). Other methods examine the scheduling of clients and staff activities, and the organizational practices and procedures that influence communications and staff morale.

Improvements in productivity are made through implementing strategies designed to change the way program inputs are used in the service delivery

process. The following steps are suggested for the measurement and improvement of productivity:

- o Identify existing productivity levels.
- o Compare existing levels to norms.
- o Assess ongoing clinical activities and the allocation, organization, and use of staff and other resources.
- o Select and implement strategies, and take corrective action when needed.
- o Assess the effectiveness of these strategies and their side effects.
- o Develop new strategies for further improvement or continue existing ones.

It is advisable that managers monitor and maintain the quality of care provided to clients when making improvements in the way clinical staff use their time. "Quality" in this context includes maintaining adequate clinical records on clients and following good clinical practice as defined by the agency's policy, procedures, and standards for clinical care.

MEASURING AND ANALYZING STAFF PRODUCTIVITY

Basically productivity is expressed as a ratio of output over input which yields a productivity index. This index is compared to a base rate which is an index established at a particular point in time and used for future comparison.

Productivity ratios are constructed using two types of measure: (1) similar parameters, such as the hours of output/hours of input; or (2) different parameters, such as the number of outputs/hours of inputs. Managers select appropriate ratios by identifying the measures of clinical service outputs and clinical staff resources that are readily available within their agencies. Some examples of commonly used output and input measures are:

Clinical Service Outputs:
- o Hours of direct service provided by clinical staff
- o Units of service received by clients

Clinical Staff Time:
- o Full-time staff equivalents allocated to clinical services
- o Total available clinical staff hours*

*Total available clinical staff time is the total hours that clinicians are paid to work annually, less paid leave time.

This index can be used to assess the staff productivity of service units or individual clinicians providing the same kinds of services. Some centers that collect full-time staff activity data on a continuous basis use a series

of ratios that show how the total time of individual staff members or groups of staff is spent in varied activities.

The staff productivity index resulting from these ratios is a shorthand way of summarizing the relationship between output and input for a specific time period. The initial index used in a study is often used as a base rate. Subsequent indices are compared to the base rate using the following formula:

$$\frac{\text{Current Productivity Index}}{\text{Base Rate Index}} \times 100 = \text{Change Index for the current period}$$

By using this method, managers can trace changes in productivity from one time to another to identify trends and problems.

ASSESSING THE ADEQUACY OF PRODUCTIVITY LEVELS

The indices described above do not tell whether clinical services are really productive; they only show the current level of activity. These indices can be compared in three different ways to assess the adequacy of current levels:[3]

- Comparisons over time;
- Comparisons with other organizational units;
- Comparisons with standards or norms from comparable agencies or programs.

The comparison of productivity levels over time (e.g., at least six months) is a commonly used method. Time comparison aids in identifying trends, such as season fluctuations in productivity or problems in scheduling and work flow.

Comparisons can be made of productivity levels between organizational units that provide the same services. Discrepancies may suggest that further study is needed to identify conditions which contribute to the differences.

Comparisons with norms of similar agencies are possible; presently, however, norms are rarely available because the application of productivity concepts to mental health centers is new and the diversity in measurement makes comparison difficult.

ANALYZING WORKLOAD

Comparisons that assess the adequacy of existing staff productivity identify an acceptable relationship between the amount of work clinicians do and the staff time available to do it that is expressed by a productivity index. These comparisons assume that existing allocations, organization, and use of staff time are adequate. To improve staff productivity through more efficient management of resources, the characteristics of workload must be examined.

The analysis of workload focuses on the process of providing services. It examines the type and amount of clinical staff that are needed to meet the service needs of clients, and it is used to plan and organize staffing patterns, assign appropriate types of staff, and define performance expectations of staff in order to meet the service needs of clients efficiently and effectively. Workload analysis can involve very sophisticated studies of clinical activities that include the amount and specific type of services required by clients as they move from intake to discharge, and the amount and type of staff or staff time required to provide these specific services. Studies of this kind have been done primarily in inpatient mental health settings. Simpler methods for examining workload can be used by managers in mental health centers. Some of these methods include the analysis of staff

activities; the comparison of productivity levels to caseloads; and analysis of the average amount of services provided by client type.

Analysis of Staff Activities

Continuous full-time staff activity reports or a periodic sample (work sampling) of staff activity can show how much time staff members actually spend performing tasks other than direct services to clients. Some examples of the areas of staff activity that might be examined are:

- Committee work, staff meetings, and special projects that support program operations;
- Non-revenue generating consultation and education services;
- Staff supervision, training, and education;
- Service documentation time;
- Case-related contacts with clients' families and other agencies;
- Job-related travel time.

Managers can use data on full-time staff activity to identify practices that lower productivity, and make appropriate changes in the assignment of staff responsibilities and scheduling. Information on the time required to perform activities that are necessary to maintain the organization, provide adequate care, maintain staff skills and motivation, and produce revenues can also be identified. Managers can use this information to assist in the reallocation of staff time, changing procedures or changing staffing patterns.

Comparisons to Caseloads and Clients Served

Analyses of staff productivity levels over time have indicated that the number of active cases carried by individual clinicians is a major factor

in the volume of direct service hours that can be produced. Caseloads must be kept at a reasonable level for clinicians to maintain adequate productivity levels.[4]

Managers can compare the average active caseload per staff and the average service hours per client against those of individual staff to assess the distribution of workload among staff. For example, a high staff productivity index, low caseload and high service hours per client might suggest that a clinician is holding some clients in treatment too long. Similarly, a low staff productivity index, low caseload and low service hours per client suggests that a clinician may not be carrying his share of the workload. Managers can develop caseload standards, improve case assignment procedures, or initiate new staff supervision practices or staff training programs when problems are found.

Analysis of Services by Client Type

The analysis of the average amount and type of services provided to a particular type of client (e.g., based on functioning levels of clients in age and disability groups) is a more sophisticated approach to workload analysis. These studies involve the analysis of retrospective data on the services provided to specific groups of clients and the amount and type of clinical staff required to provide these services to derive estimates of the expected workload of different staff members. The findings of these studies are used to establish staffing patterns to meet anticipated client needs and are usually part of the planning and budgeting process for clinical operations.

STRATEGIES FOR IMPROVING PRODUCTIVITY

After analyzing staff productivity, managers can plan strategies for improvement. External program standards and requirements, organizational policies, and the values of the community place limits on some alternatives. The strategies that are discussed are designed primarily to improve productivity by increasing the service outputs produced by available clinical staff. Three areas of improvement commonly used by managers are: (1) making better use of the available hours of clinical staff time, (2) increasing the demand for services, and (3) improving ongoing management practices. Since these strategies interact with each other in the process of delivering services, managers should be sensitive to the potential and actual effect that improvements have. Several principles can assist managers in selecting strategies to minimize unanticipated effects of interventions.

1. Selecting strategies. Managers should consider focusing on strategies to improve productivity in areas where there is low risk and high potential for change and benefit.

2. Defining priorities. When choosing from alternative strategies, managers should select those that will contribute to the general operation of the agency as well as to the improvement of staff productivity.

3. Delegating responsibility. Clinical program managers should be involved in developing productivity strategies and should be delegated the

responsibility to make decisions and take corrective action in those areas of their supervisory control in which they are able to make judgments.

4. Expectations of staff. Often the expectations of staff are not congruent with the perceived needs of management. If staff are fully informed about what is going on and why, and are given the opportunity to influence the development of strategies for improving productivity, their expectations may be more in line with the needs of management. They will also feel more accountable for the results of their performance.

5. Program evaluation data. Routine and special evaluation studies are used along with productivity indices to monitor progress toward meeting objectives, identify side effects (both negative and positive), and provide information for planning new objectives to improve productivity.

IMPROVING THE USE OF STAFF TIME

Many managers improve the productivity of clinical staff by setting objectives for service units, setting time standards, and negotiating performance contracts. On the basis of workload analyses, managers may also reassign staff or reallocate the time staff are expected to spend in non-clinical activities.

When using any of these methods to improve the productivity of clinical staff, managers should build in incentives to maintain staff morale. The absence of clear expectations may cause staff to circumvent efforts to improve productivity. To avoid this problem, managers must make their expectations clear and find ways to eliminate practices that penalize personnel

for making progress.[5] Some of the elements that can be built into strategies to improve staff productivity are:

- Defining or negotiating priorities and expectations for performance for organizational units and staff.
- Delineating responsibilities and providing feedback on the quality and level of performance attained by organizational units and staff. This includes feedback on productivity levels attained by staff.
- Providing incentives and recognition for high performance, recognizing that the nature of incentives and recognition tend to shape the future behavior of staff.
- Improving the skills of staff through adequate supervision and on-the-job training.

Service Unit Objectives

Productivity objectives for an entire service unit can be set to increase service hours. These objectives are usually part of the program planning and budgeting process. The criterion used to measure a productivity objective is the volume of outputs (e.g., direct service hours, units of service, reimbursable services) that the service unit is expected to provide. The unit managers receive monthly data reports to monitor progress toward objectives, and are assisted by the center director and evaluator in interpreting these reports and planning strategies to improve the productivity of individual staff. Objectives are usually re-examined every six months to allow flexibility in adjusting to internal and external factors that influence productivity.[6]

Staff Productivity Standards

Many managers set time standards to help clinical staff increase their productivity. Time standards are set using two different kinds of measurements.

1. $\frac{\text{Actual hours of direct service}}{\text{Total available clinical staff hours}}$

   The resulting index is compared to the standard for staff time (e.g., a standard of 50 percent direct service time or an index of .5).[7]

2. $\frac{\text{Actual hours of direct service}}{\text{Expected hours of direct service}}$

   The resulting index shows the level of achievement of individual staff members (e.g., a standard of direct service time of 20 hours per week or an index of 1.00).[8]

The measure that is chosen depends largely on the ease of obtaining data from the agency's information system and the values and preferences of managers. When these indices are used to monitor staff productivity at regular intervals (e.g., monthly reports), accurate reporting of the total available hours or expected hours must be adjusted to reflect leave time taken by clinical staff. If these adjustments are not made, low productivity will be shown when a clinician is on vacation or takes sick leave.

Staff standards are often based on the judgments of center directors and program managers about the percentages of time that should be spent by clinical staff in providing direct services. Many centers have found that clinical staff can meet a 50 percent direct service time standard; a few others set service time standards at 60 percent. These expectations are usually refined through the comparison of productivity levels over time or the analysis of workload.

One of the problems with setting uniform productivity standards for clinical staff relates to equitable expectations for clinicians with unusual caseloads, such as involuntary clients, chronic clients, or therapy groups. Involuntary or chronic clients often require more case documentation time and case-related contacts with family members, the courts, and other human service agencies. Similarly, group counseling or group therapy specialists usually require more time to document services provided to a large number of clients. In all three cases, managers should consider negotiating different standards for these staff members so that they will not be penalized for handling unusual or difficult caseloads.

Managers using productivity standards for clinical staff also place special emphasis on the importance of informing clinical supervisors and staff about the need for productivity improvement, encouraging the cooperation and support of staff, and providing regular feedback on progress in a positive, not punitive, way.

Performance Contracts

An alternative to setting standards for staff is to negotiate individual performance contracts which define the expected tasks and productivity standards with other performance criteria. The advantages of this method are (1) it helps organize staff activities, (2) it reduces supervision problems because performance expectations are clearly defined, and (3) it provides incentives to staff.[9]

Staff Reassignment and Time Reallocation

Workload analyses may indicate a need for changes in the actual staffing patterns within service units or the reallocation of the time that clinical staff spend in specific activities. These changes are made to improve the match between staff skills and the needs of clients, or because the demand for services in one unit does not require the existing number of clinical staff members. Often managers make these changes when developing plans and budgets for programs.

INCREASING THE DEMAND FOR SERVICES

If the productivity levels of clinical staff are inadequate because of low demand, managers can use several strategies to increase the volume of services:

1. Increase the awareness and acceptability of services to potential clients and referral sources through public information and education activities and citizen advisory groups, and improve the coordination of referrals with other human service groups.

2. Promote third party payment arrangements, consultation contracts, and educational services to the community.

3. Increase the availability of services by extending the hours that services are available and opening satellite clinics when appropriate.

4. Extend the services available to programs by using volunteers to provide transportation for clients, make home visits, teach arts and crafts, provide financial counseling, and tutor mentally retarded clients. Volunteers are often involved in the public relations efforts of an agency.

IMPROVING ONGOING MANAGEMENT PRACTICES

There are several aspects of management and supervision that contribute to the success of strategies to increase service outputs. The most commonly cited are: (1) protecting direct service time from other demands; and (2) maintaining good communications.

Protecting Direct Service Time

Managers in clinical and administrative support services can increase the direct service time available to clinical staff through making improvements in the scheduling of staff and client activities, such as adjusting to the patterns of client demands for services, and making the best use of the clinical time consumed in the maintenance of the organization.

Client Demand. Managers are expected to make services available for clients, but they cannot control the patterns of clients' demand for services. Clinical managers and supervisors can adjust the scheduling of routine activities around the fluctuations in the demand for services to protect the direct service time of clinical staff. Some of the ways that scheduling can improve productivity are:

1. Seasonal fluctuations in demand for services. Some agencies schedule activities, such as annual planning, staff training sessions or community education projects, during periods of expected low demand for services so that clinicians have more time to serve clients when demands for service are high.

2. Daily fluctuations in demand for services. Demand for services may be low on certain days of the week or certain times of the day. Managers often schedule activities, such as staff meetings, team planning, and inservice training, during times when clients usually do not make appointments.

3. A centralized system for booking appointments and assigning cases helps distribute clinicians' time and caseloads to increase productivity. Self-scheduling by clinicians has been described by some evaluators as a "disaster." Some centers with a well developed information system provide print-outs of appointment schedules to individual clinicians and supervisors in advance to assist them in organizing work and scheduling time.

4. Cancellations and no-shows. Clinicians may do paperwork or reschedule other clients when appointments are not kept if they have advance notice. But some managers report cancellations and no-show rates as high as 25 percent of the total number of appointments made. Others have discovered that clinicians, not clients, frequently cancel appointments. Cancellations and no-shows lower productivity because the actual staff time in providing direct services is reduced.

   Some of the approaches that centers have used to reduce no-shows are:

   - Make a reminder call to the client the day before an appointment.
   - Overschedule on a day of the week or times of the day when there is consistently a large percentage of no-shows (e.g., scheduling three appointments in a two-hour block of time. If all clients show up, the length of each appointment is reduced to 40 minutes).
   - Inform clients about the cost to the center for no-shows and encourage them to assist by cancelling appointments that they cannot keep at least 24 hours ahead of time.
   - Set a policy that clients are charged for visits that are not cancelled 24 hours in advance.
   - Schedule groups instead of one-to-one appointments for routine services, such as medication checks.

Maintenance of the Organization. Clinical staff members are involved in many activities that are necessary to the maintenance of the organization and improved communications. Two areas of activity are discussed: (1) committee work, training, and staff meetings and (2) reporting and documentation of service provided.

Committee work, staff training meetings, and staff meetings can significantly reduce the time available to provide services to clients. These meetings should be scheduled during periods of the day or month when the demand for services is the lowest (e.g., early in the day). In addition, they should be well-organized with clear objectives to make the best use of clinical staff time. Some examples are:

1. Quality assurance committee work, especially peer review, should be organized to minimize the amount of time required of individual clinicians. In many centers, clinicians are assigned peer review responsibilities on a rotating basis for short periods of time so that these activities will not consume a large amount of any one clinician's time.

2. Staff training and development meetings can be focused on timely topics that assist clinicians in doing their job better and in acquiring new skills.

3. Staff meetings can be organized so that they are not overly long or frequent. Consultations with clinical staff can be scheduled to supplement staff meetings in order to deal with the questions and problems of individual staff members.

Available direct service time can be increased by minimizing the time required of clinicians for reporting information and documenting services. Some examples are:

1. The redesign of information system input documents. Many agencies redesign service tickets, client admission, transfer and termination forms, and staff activity forms to reduce data items to a minimum and combine forms when possible.

2. Clinical records can be redesigned to simplify documentation requirements, and improve the organization and display of information used for peer review.

3. Routine clerical tasks can be transferred from clinicians to support staff (e.g., filling in details on service tickets and other forms).

Communications

Two kinds of communications influence productivity in mental health centers. The first is the formal written organizational policies/procedures and standards that provide the framework for decisions and actions by managers and clinical staff alike. The second is the day-to-day interpersonal communications that affect morale and the organizational climate.

The staff of an agency must understand what they are supposed to do, what constitutes good performance, to whom they are responsible, what the treatment philosophies, policies and goals are for their particular service, and how their service units relate to the overall operation of the agency. Up-to-date written policies and procedures, standards and job descriptions are needed for adequate staff orientation, staff training, and supervision. Without this written communication, staff members may be uncertain about the agency's goals and procedures, and their own responsibility and authority to make decisions and take action.

The quality of day-to-day interpersonal communications in mental health centers is much harder to identify, but is perhaps more important to improving productivity than written communications.

The center director and members of the management team must communicate their commitment, demonstrate their sensitivity to the concerns of the staff, and articulate their strategies to improve productivity. Good interpersonal communication is needed throughout all units of the mental health center. How this communication is maintained depends largely upon organizational structure, the interpersonal skills and abilities of managers, and the style of leadership in the agency. The literature places considerable emphasis on

staff participation in the management of human service organizations. This participation includes information exchange between managers and staff, coordination and cooperation between administration and organizational units in planning and implementing strategies, and the appropriate assignment of responsibility. Not all managers are able to use this approach, but they can develop appropriate ways to maintain good communication to assure the success of strategies to improve productivity.

MONITORING PRODUCTIVITY

After strategies to improve productivity have been initiated, managers and supervisors monitor progress through the use of key productivity indices. The data reports yielded by the center's information system to monitor, coordinate, and schedule ongoing activities can be used to monitor productivity as well. These feedback reports can be designed to make productivity data more readable and easier to use if data is translated into simple charts and graphs with more detailed supporting data on request. Timely, routine reporting of information is necessary for managers to monitor productivity and take corrective action to keep activities and the use of staff time on the desired course.

Routine and special evaluation studies can provide information that assists in making informed decisions about the effectiveness of interventions to improve productivity and aid in planning new strategies.

1. Data interpretation. Productivity indices "red flag" exceptions to what is desired and show trends. These data do not tell why these events occur. The evaluator can assist managers in monitoring and interpreting productivity indices by (a) translating data into simple charts or graphs which reflect significant trends or exceptions from what is

desired, and (b) routinely meeting with program managers and supervisors to explain the significance of data and providing additional evaluative information that may help identify why problems exist.

2. Special studies. Special evaluations may be needed to develop strategies to improve productivity. Some possible approaches are staff satisfaction questionnaires and management audits. Staff satisfaction questionnaires are used to identify morale problems. Some of the dimensions of these questionnaires are: satisfaction with work, salary level, supervision, work relationships, opportunities for training and advancement, and organizational policies and procedures. Management audits examine the goals, plans, policies, and activities of the organization or its units to find weaknesses in policies and procedures and inconsistencies between actual practice and stated procedures. Strategies are then developed to improve the quality of management and increase productivity.

3. Planning inputs. Productivity data can be evaluated and analyzed over time to provide information on workload that is useful in program and budget planning (e.g., staffing ratios, staff time allocations, and client utilization patterns).

ASSESSING THE EFFECTIVENESS OF STRATEGIES

Managers usually set six-month time limits on objectives to improve productivity. At that time, the level of achievement of these objectives and the side effects of strategies are assessed. New objectives and strategies for another six months are planned and implemented. Often the same objectives are used for an extended period of time. The primary purpose of re-examining objectives at six-month intervals is to allow flexibility in adapting to internal and external changes and to encourage a re-thinking of a rather complex set of interacting factors that contribute to the productivity of clinical staff.

SUMMARY

The traditional definition of productivity used in economics and industry is the comparison of the outputs (products) generated by an organization or industry to the inputs (resources) used to produce these outputs. The experiences of managers in mental health centers and experts in mental health management and evaluation make it apparent that this definition requires some refinement for use in mental health centers. The main focus of this refinement is the meaning of the term "output."

The purpose of mental health centers is to improve the mental health status of people in the community. Thus, the ultimate end products of mental health centers are the effects of treatment on clients. When "product" is viewed this way, productivity is the comparison of client results to the resources required to produce these results. The objective of productivity improvements is to transform resources into desirable client results, not just to produce more services with existing resources. The means for achieving this objective is to manage for improved productivity by making the best use of available resources in the process of providing services. This publication has discussed this third aspect of productivity measurement and improvement, and has focused on the relationship between service outputs and available clinical staff, or staff productivity. Both the measurement and management aspects of the means for productivity improvements have been explored. Staff productivity measurements are used to identify existing

levels of productivity, to make comparisons to determine if existing levels are adequate, and to monitor changes over time. Other assessments are made to determine the nature of workload.

Strategies designed to improve the productivity of clinical staff focus on methods for increasing the amount of services provided by available staff members. Some of these strategies include (1) making better use of the available hours of clinical staff time, (2) increasing the demand for services, and (3) improving ongoing management practices.

This publication has been limited to the measurement and improvement of the productivity of clinical staff. Its content is largely based on the recommendations of people in mental health centers and experts in the field of mental health management and evaluation. Because the application of productivity concepts are relatively new to mental health centers, there are many issues related to its definition, emphasis, and scope that are yet to be resolved.

REFERENCE NOTES

[1]This information was contributed by task force participants and presenters at the Southern Regional Education Board Workshop in Evaluating Productivity held in New Orleans, Louisiana on October 4-5, 1978.

[2]A search of the literature has shown three general approaches to evaluating the relationship between client results and resources:

A. Output value analysis assesses the value of services to clients relative to the program costs expended to provide services.

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B. Cost-outcome analysis assesses the relationship between client outcomes and the costs of providing services.

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C. Other approaches involve the relationship between the number of clients who reach acceptable levels of improvement and the total program costs expended for all clients in a particular group.

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[3]Ross, J. P. and Burkhead, J. Productivity in the Local Government Sector. Lexington, Massachusetts: D. C. Heath and Company, 1974.

[4]Personal communication; Len Meshak, Arapahoe Mental Health Center, Englewood, Colorado.

[5]Business Perspective: "Productivity: Why Employees Don't Produce More," Boardroom Reports, May 15, 1978, pp. 3-4.

[6]Personal communication; Stephen White, Northside Community Mental Health Center, Tampa, Florida.

[7]Personal communication; J. E. Willett, Northern Kentucky Mental Health/ Mental Retardation Board, Covington, Kentucky.

[8]Personal communication; M. K. Key, Dede Wallace Center, Nashville, Tennessee.

[9]Personal communication; Robin Kirk, Northeast Community Mental Health Center, Memphis, Tennessee.

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